

NOTES FROM THE BOTANIC GARDENS, SYDNEY.

No. 3.

BY J. H. MAIDEN AND E. BETCHE.

(Plate XXVIII.)

TILIACEÆ.

ELÆOCARPUS LONGIFOLIUS, *C. Moore*, in Moore and Betché's Handbook of the Flora of New South Wales, 1893.*

(Syn. *E. Bäuerlenii*, Maiden and Baker, Proc. Linn. Soc. N.S.W. [2], x. 469, 1895, with a plate; *E. Kirtoni*, F.v.M., MS. (Bailey in Syn. Queensland Flora, 1st Suppl. p. 8; Maiden, Useful Native Plants, p. 423); *E. reticulatus*, Sm., var. *Kirtoni*, F.v.M.)

Mr. Kirton, of Bulli, N.S.W., sent this plant to Baron von Mueller in 1885; the latter described it in MS. as *E. Kirtoni*, but did not publish it, we believe; at all events it never appeared in his *Census*.

The Melbourne Herbarium also contains specimens collected on the Shoalhaven by Bäuerlen in 1888; these were named by Mueller *E. reticulatus*, var. *Kirtoni*.

These specimens are quite identical with Moore's *E. longifolius*, and we are of opinion that *E. longifolius*, Moore, is not specifically distinct from *E. Bäuerlenii*, Maiden and Baker.

E. longifolius is but shortly and imperfectly described by Moore and Betché, e.g., the hairiness of the foliage and of the flowers not being mentioned.

* The name was first adopted by Moore in *General Report Sydney Int. Exhibition of 1879*, p. 738 (1880); he called it "Mountain Ash" of Illawarra, and "Military Military" of northern New South Wales, thus recognising the comparatively wide range of the species. See also Maiden, *Useful Native Plants*, p. 423.

If the tree be considered a good species (as we think it is), Moore's name, having priority, must stand.*

There are those, however, who may follow Mueller in making all the forms varieties of *E. reticulatus*, Sm., (*E. cyaneus*, Ait.).

We would, however, point out that the leaves of *E. reticulatus* are narrowed into the petiole, while those of *E. longifolius* are obtuse or rounded. In *E. reticulatus* the venation is more prominent than in *E. longifolius*. In *E. reticulatus* the fruits are Prussian-blue in colour; in *E. longifolius* they are dull dark green. See also Maiden and Baker, *loc. cit.*

Kirton's specimens came from the Illawarra, Moore's from the Gosford district, and Bäuerlen's (*E. Bäuerleni*) from the Richmond River. It is not surprising that specimens gathered over so wide a range should show variation; whether it is desirable to name, as a variety, any of these forms is a matter for subsequent consideration.

RUTACEÆ.

BORONIA LEDIFOLIA, *J. Gay*, var. GLABRA, var. NOV.

In general appearance and size much like the common form of the coast district and Dividing Range, but differing from the typical form in the entire absence of the white tomentum on the underside of the leaves. If the growing plant be touched, the very rancid odour at once arrests attention, being very much more marked than in the case of the normal species from the coast and mountain districts.

Harvey Ranges, near Peak Hill, N.S.W. (J. H. Maiden, September, 1898).

PHEBALIUM NOTTHI, *F.v.M.*—Originally described from specimens collected in the Newcastle Range, Queensland, about 18° South, and now found in New South Wales in 32° South. Of

* Unless Bailey's description *loc. cit.* (1886) of a Queensland tree called by him *E. Kirtonii*, F.v.M., a species never, however, described by the author himself, can cause *E. Kirtonii* to take priority. It could surely, however, never be admitted that one author may publish for another, in that other's name.

intermediate localities only that of Expedition Range, Queensland, is known to us, though probably it will be found in the dry western spurs of the Great Dividing Range after a thorough botanical exploration of the colony. The Harvey Range specimens do not attain more than 3ft. in height, as far as seen, while the Expedition Range specimens are described as 10ft. high; furthermore they differ from the original description (F.v.M. *Fragm.* vi. p. 22) in the rather smaller and narrower leaves, the longer pedicels, and the flowers being generally 5-merous. Mueller describes the calyx-lobes, petals and ovarium-cells as six or seven in number, but to judge from the single small original specimen now in the Melbourne Herbarium, he had only scanty material at his disposal and may have described the flowers from abnormal specimens. It is a most profuse flowerer, and the large size of the flowers combined with the unusual colour (a deep mauve or light purple) render it a most desirable plant for cultivation.

Harvey Ranges, near Peak Hill, N.S.W. (J. H. Maiden, September, 1898).

EPACRIDÆ.

RUPICOLA,* gen.nov.

Calyx consisting of five sepals. Corolla normally 5-cleft, with a very short tube and with spreading segments quincuncially imbricate in bud. Stamens attached to the base of the corolla-tube, shorter than the corolla; anthers adnate, 2-celled, connivent round the style but not cohering, opening introrsely by a single short terminal slit. Hypogynous disc inconspicuous. Ovary 5 celled, with numerous ovules in each cell attached to an elongated placenta near the top of the axis; style filiform, inserted in a tubular depression of the ovary. Capsule and seeds not seen. Shrub with shortly petiolate narrow leaves and solitary axillary flowers on peduncles shorter than the leaves, covered with bracts passing gradually into the sepals.

* From *rupes-is*, a cliff, and *cola* an inhabitant, in allusion to the situations it frequents.

R. SPRENGELIOIDES, n.sp.

An erect shrub attaining above 5ft. in height, with virgate slightly pubescent branches. Leaves crowded, erect or somewhat spreading, rigid, very shortly petiolate, linear-lanceolate, slightly concave, the longest $1\frac{1}{4}$ inches long and scarcely $1\frac{1}{2}$ lines broad, tapering to a rigid though obtuse point. Flowers in the axils of the leaves, on peduncles about 4 to 5 lines long. Sepals narrow, rather acute, tapering from a broad base, about 2 or occasionally 3 lines long. Corolla white, very open, broadly campanulate or almost rotate, occasionally 6- or even 7-lobed, the tube about 1 line long, the lobes ovate-lanceolate, rather acute, about three times as long as the tube. Filaments flat in the adnate upper part, tapering towards the base; anthers about as long as the filaments, the terminal slit extending scarcely half way down, leaving the longitudinal dissepiment in the lower part of the anther. Style about half as long again as the anthers, but scarcely longer than the corolla; stigma small and truncate.

Southern edge of King's Table-land, Blue Mountains, N.S.W. Not rare on the sandstone cliffs descending into the Cox River or Burraborang Valley (J. H. Maiden and W. Forsyth, October, 1898).

The true position of the genus in the system is a matter of doubt tous. In its adnate and two-celled anthers, it approaches the curious Tasmanian genus *Prionotes* alone, but differs widely from it in every other respect; in the shape of the corolla, connivent anthers and absence of hypogynous scales it much resembles *Sprengelia*, but the foliage is totally different; in general appearance it strikingly resembles the Tasmanian *Epacris mucronulata*, R.Br., but the resemblance is confined to the foliage and long peduncles. Though foliage is generally of little systematic value, all systematists agree in dividing the tribe Epacreae into three natural groups according to the base of the leaves; following these accepted systems we have to place it next to *Epacris*, though with this genus it has only the aestivation of the corolla in common, besides the foliage and bracts.

PROTEACEÆ.

GREVILLEA JUNIPERINA, *R.Br.*, var. TRINERVATA, var. nov.--
Leaves narrow-lanceolate, about 6 to 9 lines long, trinerved.
Flowers creamy-yellow without any tinge of red.

Barber's Creek, N.S.W. (J. H. Maiden, October, 1898).

R. Brown's *G. juniperina* and *trinervis* are very closely allied as already observed by Bentham in the *Flora Australiensis*, and the present specimens make it very doubtful whether the specific distinction can be upheld. In *G. trinervis* the leaves are very variable, but the colour of the flowers as hitherto noted has been uniformly red; in *G. juniperina* the colour of the flower varies, but the leaves have hitherto been found uniformly linear-subulate.

The Barber's Creek specimens have the flowers of *G. juniperina* and the foliage of the short- and broad-leaved New England forms of *G. trinervis*.

EUPHORBIACEÆ.

RICINOCARPUS BOWMANI, *F.v.M.*, var. ALBUS, var. nov.

Flowers white; the males mostly solitary, only occasionally in clusters of two or three.

Bomera, New England (W. MacDonald, October, 1898).

Mr. J. R. Garland informs us that he has seen a white flowering form of this species in the Wagga Wagga district, but as specimens are not available we are unable to state whether it is identical with the Bomera plant.

NAIADÆÆ.

POTAMOGETON OCHREATUS, *Raoul.*—Common throughout extra-tropical Australia and hitherto known as *P. obtusifolius*, Mert., and Koch, in all the colonies except South Australia (Prof. Tate has already previously adopted the name *P. ochreatus* in his Census of South Australian Plants).

Herr Baagoe, of Naestved, Denmark, drew our attention to the confusion of the two species, and we are indebted to him for the following diagnosis of *P. ochreatus*, drawn up by him from New

Zealand and Australian specimens, and contrasted with the true *P. obtusifolius*.

P. ochreatus, Raoul.

P. obtusifolius, Mert., & Koch.

Stem slender, terete or somewhat flattened, the leaves spread, a little branched, internodes longer.

Stem compressed, with rough rounded edges, very much branched.

Leaves sessile, sometimes suddenly narrowing at the base, but most often half amplexicaul, obtuse or a little acuminate, without point.

Leaves sessile, all more or less narrowing at the base, none amplexicaul, with two distinct and often reddish-coloured glands at the base, with one, sometimes two, distinct nerves on each side of the *midrib*, but far distant from it, near the edge; no intermediate fine longitudinal nerves.

Midrib broad, with many fine longitudinal nerves on each side.

Ligule broader at the top than at the base, and thus infundibuliform or cup-formed, very deciduous without changing in fibres.

*Ligule** acuminate and thus more narrow at the top than at the base; more constant.

Fruit nearly without edges, slightly keeled, oblique, elliptic.

Fruit with distinct edges and most prominent beak.

Beak short, with flattened *stigma*.

Beak long, much recurved, the *stigma* not flattened.

Spike 1 and 1½ inches long, slender, cylindrical, interrupted, not very dense.

Fruit-bearing spike ½-1 inch long, thick, cylindrical, and very dense, compact, not interrupted.

Peduncles 2-3 times longer than the spike, thicker than the stem.

Peduncles of the same length or shorter than the spike, the same thickness as the stem or thinner.

* Stipule of Bentham.

Search alone will settle the question as to whether *P. obtusifolius*, M. and K., will yet be found in Australia, but, so far, all the Australian specimens received by Herr Baagoe under this name belong to *P. ochreatus*, Raoul. (See also A. Bennett, *Journal of Botany*, xxv. 178).

Bentham (*Flora Australiensis*, vii. 173) is mistaken in considering *P. ochreatus*, Raoul, as synonymous with the *P. obtusifolius*, M. and K.

Herr Baagoe writes:—"When Hooker considers *P. ochreatus*, Raoul, as synonymous with *P. compressus*, L., this is a mistake, and if you consider *P. compressus* as synonymous with *P. obtusifolius*, M. and K., this is scarcely correct.

"But *P. ochreatus* comes rather near to the European *P. zosterifolius*, Schum., though it is easily separated from this by the latter's much-winged stem, shorter fruit-spike and very broad stigma.

"*P. ochreatus*, Raoul, is synonymous with *P. gramineus*, R.Br., (Prodrom. 373).

"*P. compressus*, Linn., is synonymous with *P. zosterifolius*, Schum., (Enum. plantar. Sael.); *P. zosterophyllus*, (Fl. Belg.).

"*P. obtusifolius*, M. and K., is synonymous with *P. compressus*, Wahl.; *P. gramineus*, (Fl. Brit. i. 196); *P. tataricus*, Less., (according to *Index Kewensis*)."

The whole plant (*P. ochreatus*, Raoul) is more robust, the leaves broader and more obtuse, and denser on the *branches*. The spike and peduncle are of quite another shape than those of *P. obtusifolius*, and finally the ligules are very different.

EXPLANATION OF PLATE.

Plate xxviii.

Rupicola sprengelioides.

- Fig. 1.—Flower and single leaf.
Fig. 2.—Peduncle with bracts and sepals.
Fig. 3.—Corolla, seen from the back.
Fig. 4.—Stamens, the corolla partly removed.
Fig. 5.—A single stamen.